GlycA has been associated with future cardiovascular (CV) risk among patients with or without pre-existing coronary artery disease (CAD).

However, whether GlycA is an independent and additive risk predictor from other known inflammatory markers, such as high sensitivity C-reactive protein (hsCRP) needs further study.

Baseline GlycA was determined by nuclear magnetic resonance (NMR) spectroscopy.

Baseline hsCRP testing was performed with hsCRP Elisa by Sigma Aldrich (Cat #E120041).

GlycA and hsCRP concentrations were stratified into high and low categories by their median values:
- GlycA: median = 339 µmol/L (<339, n=1,053; >339, n=1,043; IQR: <281, >281)
- hsCRP: median = 6.25 mg/L (<6.25, n=1,499; >6.25, n=1,493; IQR: <4.08, >4.08)

Categories of low and high GlycA and hsCRP were made to determine associations to endpoints:
- LowGlycA/Low hsCRP, n=1,004
- Low GlycA/High hsCRP, n=493
- High GlycA/Low hsCRP, n=493
- High GlycA/High hsCRP, n=1,000

Multivariable Cox hazard regression was utilized to determine the association of the high and low categories to major adverse cardiovascular events (MACE).

MACE was defined as the first occurrence of death, follow-up myocardial infarction (MI), follow-up heart failure (HF) hospitalization, and stroke.

Patients were followed for a mean of 7.0±2.8 (median: 7.9) years.

GlycA and hsCRP were moderately correlated: spearman r=0.463, p<0.0001

Baseline levels of both GlycA and hsCRP were found to be independent and additive markers of risk for future MACE, especially death and HF hospitalization.

Further studies are need to determine the differential pathophysiology of these two markers.